Clinical Guidelines for Stroke Management

Summary – Psychology

This summary is a quick reference to the recommendations in the Clinical Guidelines for Stroke Management most relevant to psychology.

This psychology summary is relevant for: psychologists, clinical psychologists, psychiatrists, and neuropsychologists.

While this summary focuses on specific recommendations, stroke care is the most effective when all members of an interdisciplinary team are involved. For the comprehensive set of recommendations that covers the whole continuum of stroke care, please refer to further information on InformMe https://informme.org.au/Guidelines/Clinical-Guidelines-for-Stroke-Management.

The Stroke Foundation in partnership with Cochrane Australia is testing a model of continually reviewing and updating recommendations for the Clinical Guidelines for Stroke Management in response to new evidence on a monthly basis. For changes to recommendations based on new research evidence, please refer to further information on InformMe https://informme.org.au/Guidelines/Living-guidelines-for-stroke-management

The Clinical Guidelines uses an internationally recognised guideline development approach called GRADE (Grading of Recommendations Assessment, Development and Evaluation) and an innovative guidelines development and publishing platform known as MAGICapp (MAking Grade the Irresistible Choice). GRADE ensures a systematic process in developing recommendation, which are based on the balance of benefits and harms, quality of evidence, patient values, and resource considerations. MAGICapp enables transparent display of this process and access to additional practical information for recommendation implementation.

Recommendations

Each recommendation is given a strength based on GRADE. GRADE methodology includes four factors to guide the development of a recommendation and determine the strength of that recommendation.

- The balance between desirable and undesirable consequences
- Confidence in the estimates of effect (quality of evidence)
- Confidence in values and preferences and their variability (clinical and consumer preferences)
- Resource use (cost and implementation considerations).

The GRADE process uses only two categories for the strength of recommendation, based on how confidence the guideline developers are in that the "desirable effects of an intervention outweigh undesirable effect […] across the range of patients for whom the recommendation is intended" (GRADE Handbook):

- **Strong recommendations:** where guideline developers are certain that the evidence supports a clear balance towards either desirable or undesirable effects; or
- **Weak recommendations:** where guideline developers are not as certain about the balance between desirable and undesirable effects as the evidence base isn't as robust.

These strong or weak recommendations can either be for or against an intervention. If the recommendation is AGAINST an intervention this means it is recommended NOT to do that intervention.

Consensus-based recommendations: statements have been developed based on consensus and expert opinion (guided by any underlying or indirect evidence) for topics where there is either a lack of evidence or insufficient quality of evidence on which to base a recommendation but it was felt that advice should be made.

Practice points: for questions outside the search strategy (i.e. where no systematic literature search was conducted), additional considerations are provided.

Recommendations are presented as at June 2025 with a note if it has changed in the last two years and are also presented in Chapter order for easier reference to the relevant section of the full Clinical Guidelines.

For the full list of references, please refer to the individual MAGICapp chapters through InformMe https://informme.org.au/Guidelines/Clinical-Guidelines-for-Stroke-Management.

Chapter 3 of 8: Acute medical and surgical management

Stroke unit care

Strong recommendation

All stroke patients should be admitted to hospital and be treated in a stroke unit with an interdisciplinary team. (Langhorne et al. 2020)

Info box

Practice points

- All stroke patients should be admitted directly to a stroke unit (preferably within three hours of stroke onset).
- For patients with suspected stroke presenting to non-stroke unit hospitals, transfer protocols should be developed and used to guide urgent transfers to the nearest stroke unit hospital.
- Where transfer is not feasible, smaller isolated hospitals should manage stroke services in a manner that adheres as closely as possible to the criteria for stroke unit care. Where possible, stroke patients should receive care in geographically discrete units.

Strong recommendation

All acute stroke services should implement standardised protocols to manage fever, glucose and swallowing difficulties in stroke patients. (Middleton et al. 2011)

Assessment for rehabilitation

Info box

Practice points

- Every stroke patient should have their rehabilitation needs assessed within 24–48 hours of admission to the stroke unit by members of the interdisciplinary team, using an appropriate process or tool e.g. the Assessment for Rehabilitation Tool (Australian Stroke Coalition Working Group 2012).
- Any stroke patient with identified rehabilitation needs should be referred to a rehabilitation service.
- Rehabilitation service providers should document whether a stroke patient has rehabilitation needs and whether appropriate rehabilitation services are available to meet these needs.

Palliation

Strong recommendation

Stroke patients and their families/carers should have access to specialist palliative care teams as needed and receive care consistent with the principles and philosophies of palliative care. (Gade et al. 2008)

Practice statement

Consensus-based recommendations

- For patients with severe stroke who are deteriorating, a considered assessment of prognosis or imminent death should be made.
- A pathway for stroke palliative care can be used to support stroke patients and their families/carers and improve care for people dying after stroke.

Chapter 4 of 8: Secondary prevention

Adherence to pharmacotherapy

Weak recommendation

Interventions to promote adherence with medication regimens may be provided to all patients with stroke. Such regimens may include combinations of the following:

- reminders, self-monitoring, reinforcement, counselling, motivational interviewing, family therapy, telephone follow-up, supportive care and dose administration aids (Lawrence et al. 2015; Mahtani et al. 2011; Nieuwlaat et al. 2014; Haynes et al. 2008)
- development of self-management skills and modification of dysfunctional beliefs about medication (O'Carroll et al. 2014; Kronish et al. 2014)
- information and education in hospital and in the community (Lawrence et al. 2015; Mahtani et al. 2011; Nieuwlaat et al. 2014).

Lifestyle modifications

Info box

Practice points

All patients with stroke or TIA (except those receiving palliative care) should be assessed and informed of their risk factors for recurrent stroke and strategies to modify identified risk factors. This should occur as soon as possible and prior to discharge from hospital.

Weak recommendation

Interventions addressing secondary stroke risk factors may be used for all people with stroke and TIA. Such interventions should include multiple components including individual (support and counselling) and organisational approaches (regular reviews by relevant health care professionals) and include exercise training as a component. (Bridgwood et al. 2020; Liljehult et al. 2020; Wang et al. 2019; Deijle et al. 2017)

Smoking

Info box

Practice points

Patients with stroke or TIA who smoke should be advised to stop and assisted to quit in line with existing guidelines, such as Supporting smoking cessation: a guide for health professionals. (RACGP 2019)

Alcohol

Info box

Practice points

People with stroke or TIA should be advised to avoid excessive alcohol consumption (>4 standard drinks per day) in line with the Australian Guidelines to Reduce Health Risks from Drinking Alcohol. (NHMRC 2020)

Chapter 5 of 8: Rehabilitation

Goal setting

Strong recommendation

- Health professionals should initiate the process of setting goals, and involve stroke survivors and their families and carers throughout the process. Goals for recovery should be client-centred, clearly communicated and documented so that both the stroke survivor (and their families/carers) and other members of the rehabilitation team are aware of goals set. (Sugavanam et al. 2013; Taylor et al. 2012)
- Goals should be set in collaboration with the stroke survivor and their family/carer (unless they choose not to participate) and should be well-defined, specific and challenging. They should be reviewed and updated regularly. (Sugavanam et al. 2013; Taylor et al. 2012)

Communication difficulties

Assessment of communication deficits

Info box

Practice points

- All stroke survivors should be screened for communication deficits using a screening tool that is valid and reliable.
- Those stroke survivors with suspected communication difficulties should receive formal, comprehensive assessment by a specialist clinician to determine the nature and type of the communication impairment.

Cognitive communication deficits

Practice statement

Consensus-based recommendations

Stroke survivors with difficulties in communication following right hemisphere damage should have input from a suitably trained health professional including:

- a comprehensive assessment,
- development of a management plan, and
- family education, support and counselling as required. (Lehman Blake et al. 2013; Ferre et al. 2011)

Management may include:

- Motoric-imitative, cognitive-linguistic treatments to improve use of emotional tone in speech production. (Rosenbek et al. 2006)
- Semantic-based treatment connecting literal and metaphorical senses to improve comprehension of conversational and metaphoric concept. (Lungren et al. 2011)

Cognition and perception difficulties

Assessment of cognition

Info box

Practice points

- All stroke survivors should be screened for cognitive and perceptual deficits by a trained person (e.g. neuropsychologist, occupational therapist or speech pathologist) using validated and reliable screening tools, ideally prior to discharge from hospital.
- Stroke survivors identified during screening as having cognitive deficits should be referred for comprehensive clinical neuropsychological investigations.

Attention and concentration

Practice statement

Consensus-based recommendation

For stroke survivors with attentional impairments or those who appear easily distracted or unable to concentrate, a formal neuropsychological or cognitive assessment should be performed.

Weak recommendation

For stroke survivors with attention and concentration deficits, cognitive rehabilitation may be used. (Loetscher et al. 2019; Rogers et al. 2018; Virk et al. 2016)

Weak recommendation

For stroke survivors with attention and concentration deficits, exercise training and leisure activities may be provided. (Liu-Ambrose et al. 2015)

Memory

Weak recommendation

For stroke survivors with memory deficits, cognitive rehabilitation may be used to improve memory function in the short term. Memory rehabilitation strategies may include internal (mental) strategies (e.g. association, mental rehearsal, rhymes) and external compensatory aids (e.g. notebooks, diaries, calendars, alarms, audio recordings, photos, mobile phones). (das Nair et al. 2016; Withiel et al. 2019)

Practice statement

Consensus-based recommendations

Any stroke survivor found to have memory impairment causing difficulties in rehabilitation or adaptive functioning should:

- be referred to a suitably qualified healthcare professional for a more comprehensive neuropsychological and functional assessment of their memory abilities and needs;
- have their nursing and therapy sessions tailored to use techniques that capitalise on preserved memory abilities and existing memory strategies (both internal and external);
- be comprehensively trained on how to use internal strategies (e.g. association, mental rehearsal, rhymes) and external strategies (e.g. notebooks, diaries, audio recordings, smartphone apps and alarms);

  have therapy delivered in an environment as similar to the stroke survivor's usual environment as possible to encourage generalisation.

Executive function

Info box

Practice points

- Stroke survivors considered to have problems associated with executive functioning deficits should be formally assessed by a suitably qualified and trained person, using reliable and valid tools that include measures of behavioural symptoms.
- For stroke survivors with impaired executive functioning, the way in which information is provided should be tailored to accommodate/compensate for the particular area of dysfunction.

Weak recommendation

For stroke survivors with cognitive impairment, meta-cognitive strategy and/or cognitive training may be provided. (Zucchella et al. 2014; Skidmore et al. 2015)

Telehealth in rehabilitation

Weak recommendation

Telehealth services may be used as an alternative approach to delivering rehabilitation, especially for patients who cannot access specialist rehabilitation in the community. It may also be used as an adjunct to in-person therapy. Delivering of specific interventions via telehealth should only be considered for those that have demonstrated benefits. (Laver et al. 2020)

Chapter 6 of 8: Managing complications

Central post-stroke pain

Practice statement Updated

Consensus-based recommendations

For stroke survivors with central post-stroke pain tricyclic antidepressant or antiepileptic medication may be trialed to reduce pain. Any trial of medications to reduce pain needs to be undertaken with caution with planned follow up to minimise risks. Any non-pharmacological interventions trialed are strongly encouraged to be used within a research framework.

Fatigue

Practice statement

Consensus-based recommendations

- Therapy for stroke survivors with fatigue should be organised for periods of the day when they are most alert.
- Stroke survivors and their families/carers should be provided with information, education and strategies to assist in managing fatigue.
- Potential modifying factors for fatigue should be considered including avoiding sedating drugs and alcohol, screening for sleep-related breathing disorders and depression.
- While there is insufficient evidence to guide practice, possible interventions could include cognitive behavioural therapy (focusing on fatigue and sleep with advice on regular exercise), exercise and improving sleep hygiene.

Mood disturbance

Mood assessment

Info box

Practice points

- Stroke survivors with suspected altered mood (e.g. depression, anxiety, emotionalism) should be assessed by trained personnel using a standardised and validated scale for use in people with stroke.
- Diagnosis should only be made following clinical interview.

Treatment for Emotionalism

Weak recommendation

For stroke survivors with emotionalism, antidepressant medication such as selective serotonin reuptake inhibitors (SSRIs) or tricyclic antidepressants may be used. (Allida et al. 2022)

Prevention of depression

Weak recommendation

For stroke survivors, antidepressant medication may be used to prevent depression. (Allida et al. 2020)

Weak recommendation

For stroke survivors, psychological strategies (e.g. problem solving, motivational interviewing) may be used to prevent depression. (Allida et al. 2020)

Treatment for depression

Weak recommendation

For stroke survivors with depression, antidepressants, which includes SSRIs should be considered. There is no clear evidence that particular antidepressants produce greater effects than others and will vary according to the benefit and risk profile of the individual. (Allida et al. 2023)

Weak recommendation

For stroke survivors with depression or depressive symptoms, psychological therapy may be provided. (Allida et al. 2023)

Weak recommendation

For stroke survivors with depression or depressive symptoms, structured exercise programs, particularly resistance training or programs of high intensity, may be used. (Eng et al. 2014; Saunders et al. 2020)

Weak recommendation

For stroke survivors with depression or depressive symptoms, acupuncture may be used. (Zhang et al. 2010)

Weak recommendation

For stroke survivors with depression, non-invasive brain stimulation (repetitive transcranial magnetic stimulation [rTMS]) may be used. (Allida et al. 2023)

Treatment of anxiety

Practice statement

Consensus-based recommendations

For people with anxiety after stroke, psychological therapy and/or relaxation strategies, such as yoga may be trialed to reduce levels of anxiety. The addition of pharmacotherapy should be very carefully considered taking into account higher risk of harms.

Personality and behaviour

Practice statement

Consensus-based recommendations

- Behavioural changes after stroke can impact on a person's ability to engage in meaningful activities and also their quality of life. Therefore, the impact of any behavioural changes on relationships, employment and leisure should be assessed and addressed across the lifespan.
- Stroke survivors and their families/carers should be given access to individually tailored interventions for personality and behavioural changes. This may include positive behaviour support programs, anger-management therapy and rehabilitation training and support in management of complex and challenging behaviour.

Chapter 7 of 8: Discharge planning and transfer of care

Information and education

Strong recommendation

- All stroke survivors and their families/carers should be offered information tailored to meet their individual needs using relevant language and communication formats. (Crocker et al. 2021)
- Information should be provided at different stages in the recovery process. (Crocker et al. 2021)
- An approach of active engagement with stroke survivors and their families/carers should be used allowing for the provision of material, opportunities for follow-up, clarification, and reinforcement. (Crocker et al. 2021)

Info box

Practice points

- Stroke survivors and their families/carers should be educated in the FAST stroke recognition message to maximise early presentation to hospital in case of recurrent stroke.
- The need for education, information and behaviour change to address long-term secondary stroke prevention should be emphasized (refer to Secondary Prevention).

Discharge care plans

Strong recommendation

Comprehensive discharge care plans that address the specific needs of the stroke survivor should be developed in conjunction with the stroke survivor and carer prior to discharge. (Johnston et al. 2010; Goncalves-Bradley et al. 2016)

Info box

Practice point

Discharge planning should commence as soon as possible after the stroke patient has been admitted to hospital.

Practice statement

Consensus-based recommendation

A discharge planner may be used to coordinate a comprehensive discharge program for stroke survivors.

Practice statement

Consensus-based recommendations

To ensure a safe discharge process occurs, hospital services should ensure the following steps are completed prior to discharge:

- Stroke survivors and families/carers have the opportunity to identify and discuss their post-discharge needs (physical, emotional, social, recreational, financial and community support) with relevant members of the multidisciplinary team.
- General practitioners, primary healthcare teams and community services are informed before or at the time of discharge.
- All medications, equipment and support services necessary for a safe discharge are organised.
- Any necessary continuing specialist treatment required has been organised.
- A documented post-discharge care plan is developed in collaboration with the stroke survivor and family and a copy provided to them. This discharge planning process may involve relevant community services, self-management strategies (i.e. information on medications and compliance advice, goals and therapy to continue at home), stroke support services, any further rehabilitation or outpatient appointments, and an appropriate contact number for any post-discharge queries

A locally developed protocol or standardised tool may assist in implementation of a safe and comprehensive discharge process. This tool should be aphasia and cognition friendly.

Patient and carer needs

Practice statement

Consensus-based recommendation

Hospital services should ensure that stroke survivors and their families/carers have the opportunity to identify and discuss their post-discharge needs (including physical, emotional, social, recreational, financial and community support) with relevant members of the interdisciplinary team.

Carer training

Weak recommendation

Relevant members of the interdisciplinary team should provide specific and tailored training for carers/family before the stroke survivor is discharged home. This training should include, as necessary, personal care techniques, communication strategies, physical handling techniques, information about ongoing prevention and other specific stroke-related problems, safe swallowing and appropriate dietary modifications, and management of behaviours and psychosocial issues. (Forster et al. 2013)

Chapter 8 of 8: Community participation and long-term care

Self-management

Strong recommendation **New**

Self-management interventions that are directed by the stroke survivor, should be offered within the first four months of discharge into community living. The strongest evidence base exists for the 'Take Charge After Stroke' intervention. (Fu et al. 2020)

Weak recommendation

- Stroke survivors who are cognitively able and their carers should be made aware of the availability of generic self-management programs before discharge from hospital and be supported to access such programs once they have returned to the community.
- Stroke-specific self-management programs may be provided for those who require more specialised programs.
- A collaboratively developed self-management care plan may be used to harness and optimise self-management skills.

(Fryer et al 2016; Oh et al. 2022)

Leisure

Weak recommendation

For stroke survivors, targeted occupational therapy programs including leisure therapy may be used to increase participation in leisure activities. (Dorstyn et al. 2014; Walker et al. 2004)

Return to work

Weak recommendation

- All stroke survivors should be asked about their employment (paid and unpaid) prior to their stroke and if they wish to return to work.
- For stroke survivors who wish to return to work, assessment should be offered to establish abilities relative to work demands. In addition, assistance to resume or take up work including worksite visits and workplace interventions, or referral to a supported employment service should be offered. (Ntsiea et al. 2015)

Sexuality

Practice statement

Consensus-based recommendations

Stroke survivors and their partners should be offered:

- the opportunity to discuss sexuality and intimacy with an appropriate health professional; *and*
- written information addressing issues relating to sexual intimacy and sexual dysfunction post stroke.

Any discussion or written information should address psychosocial as well as physical function.

Support

Peer support

Weak recommendation

Stroke survivors and their families/carers should be given information about the availability and potential benefits of a local stroke support group and/or other sources of peer support before leaving hospital and when back in the community. (Kruithof et al. 2013)

Carer support

Strong recommendation

Carers of stroke survivors should be provided with tailored information and support during all stages of the recovery process. This support includes (but is not limited to) information provision and opportunities to talk with relevant health professionals about the stroke, stroke team members and their roles, test or assessment results, intervention plans, discharge planning, community services and appropriate contact details. Support and information provision for carers should occur prior to discharge from hospital and/or in the home and can be delivered face-to-face, via telephone or computer. (Legg et al. 2011; Eames et al. 2013)

Weak recommendation New

Carers should receive psychosocial support throughout the stroke recovery continuum to ensure carer wellbeing and the sustainability of the care arrangement. Carers should be supported to explore and develop problem solving strategies, coping strategies and stress management techniques. The care arrangement has a significant impact on the relationship between caregiver and stroke survivor so psychosocial support should also be targeted towards protecting relationships within the stroke survivors support network. (Minshall et al. 2019; Chen et al. 2014)

Practice statement

Consensus-based recommendations

- Where it is the wish of the stroke survivor, carers should be actively involved in the recovery process by assisting with goal setting, therapy sessions, discharge planning, and long-term activities.
- Carers should be provided with information about the availability and potential benefits of local stroke support groups and services, at or before the person's return to the community.
- Assistance should be provided for families/carers to manage stroke survivors who have behavioural problems.

For access to the full Clinical Guidelines and further information refer to InformMe https://informme.org.au/Guidelines/Clinical-Guidelines-for-Stroke-Management.